**Convex Lens Practice Worksheet** Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. A 15 cm object is placed 45 cm from a convex lens, which has a focal length of 15 cm. Draw a ray diagram and solve for the image distance, image height, and describe the image.

Find the image distance:

Find the image height:

Describe the image:

2. A 15cm object is placed 30 cm from the convex lens. The lens has a focal length of 15 cm. Draw a ray diagram and solve for the image distance, image height, and describe the image.

Find the image distance:

Find the image height:

Describe the image:

3. A 15cm object is placed 20 cm from the convex lens. The lens has a focal length of 15 cm. Draw a ray diagram and solve for the image distance, image height, and describe the image.

Find the image distance:

Find the image height:

Describe the image:

4. A 15cm object is placed 10 cm from the convex lens. The lens has a focal length of 15 cm. Draw a ray diagram and solve for the image distance, image height, and describe the image.

Find the image distance:

Find the image height:

Describe the image: